

Notice of Allowability

Application No.

10/051,765

Examiner

Blessing M. Fubara

Applicant(s)

FITZPATRICK ET AL.

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to communication filed 05/19/04.
2. ☒ The allowed claim(s) is/are 36-50, 59, 60, 65-71, 75 and 76 (claims are renumbered).
3. ☐ The drawings filed on _____ are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date 04/26/04
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____.
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

THURMAN K. PAGE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1600

DETAILED ACTION

Examiner acknowledges receipt of IDS and remarks filed 04/26/04 and 05/19/04 respectively.

Provisional Rejection under Obviousness-Type Double Patenting

Applicants filed a Terminal disclaimer in co-pending application 10/051,766 and applicants argument supported by MPEP 804 is persuasive regarding maintaining or withdrawal of the rejection. The Provisional Obviousness-type double patenting rejection over application 10/051,766 is withdrawn. Claims 59, 60 and 65-71, which were withdrawn from consideration are now examined with the elected claims as requested by applicants in the remarks of 05/19/04.

1. The following is an examiner's statement of reasons for allowance:

The pending claims are directed to pharmaceutical formulation containing the ionene polymers recited in claims 36, 38, 59 and 67. The pending claims are also directed to treating microbial infection with the compositions that contain the ionene polymers of claims 36, 38, 59 and 67.

Muramatsu et al. (US 3,988,158) discloses anti-static and anti-foaming agents that are quaternary ammonium containing polymers of the types listed in column 3 line 20 to column 8 line 52. Structures 8, 9 and 10 are the closest repeating units to the repeating units of the instant claims but the repeating units of Muramatsu, though having pyridinium moieties do not have alcohol group containing substituent on any of the pyridinium rings. The ionene polymer of Dominguez et al. (US 5,283,316) do not have repeating units that have pyridinium type monomers as required by the instant claims (see abstract; column 3, lines 62-67; column 4, lines 1-6; column 5, lines 25-53). Tachibana et al. (US 4,898,808) discloses polymeric compound

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having repeating units of the type in Formula I. However, the closest structure that is encompassed by Formula I (structures I-10) differs from the repeating units of the instant claims because the claims require that the substituent on the pyridinium ring contain one or more alcoholic groups and the repeating unit of the instant claims do not permit aromatic type substitution. Drake et al. (US 5,419,897) discloses ionene polymer and administers the ionene polymer to treat helminth infections (abstract, column 3, lines 44-66). The ionene polymer of Drake does not have pyridinium containing repeating unit.

2. Claims 36-50, 75 and 76 are directed to an allowable product. Pursuant to the procedures set forth in the Official Gazette notice dated March 26, 1996 (1184 O.G. 86), claims 59, 60, 65-71, previously withdrawn from consideration as a result of a restriction requirement, are now subject to being rejoined. Claims 59, 60, 65-71 are hereby rejoined and fully examined for patentability under 37 CFR 1.104.

Since all claims previously withdrawn from consideration under 37 CFR 1.142 have been rejoined, the restriction requirement made in the Office action mailed on 02/17/2004 is hereby withdrawn. The pending claims are allowable.


Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Blessing M. Fubara whose telephone number is (571) 272-0594. The examiner can normally be reached on 7 a.m. to 3:30 p.m. (Monday to Friday).

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thurman K. Page can be reached on (571) 272-0602. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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